

Bhāskara I | Encyclopedia.com

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(fl. 629)

astronomy.

Bhāskara I, who was one of the leading exponents of Āryabhata I's two systems of astronomy (see Essays V and VI), composed his commentary on the *Āryabhatīya* in 629. In this work he mentions Valabhī (Vala, in Saurāstra), Bharukaccha (Broach, in Gujarat), Śivābhāgapura (Śivārajapura, in Saurāstra), and Sthāneśvara (Thanesar, in the Panjab). But in this same work, and in the *Mahābhāskarīya*, Bhāskara constantly speaks of the *Āryabhatīya* as the *Āsmakatantra* and its followers as the *Āsmakīyāh*. This seems to indicate that he belonged to a school of followers of the *Āryabhatīya* which flourished in Āsmaka (probably the Nizamabad District of [Andhra Pradesh](#)). It is supposed by Shukla that Bhāskara was born in either Saurāstra or Āsmaka, and later migrated to the other.

Bhāskara is the author of three works: the *Mahābhāskarīya*, the *Laghubhāskarīya*, and the *Āryabhatīyabhāṣya*. The first contains eight chapters:

1. On the mean longitudes of the planets.
2. On the correction due to local longitude
3. On the three problems relating to diurnal motion, and on the conjunctions of the planets with the stars.
4. On the true longitudes of the planets.
5. On solar and lunar eclipses.
6. On heliacal risings and settings, on the lunar crescent, and on the conjunctions of the planets.
7. The parameters according to the *audayaka* (*Āryapaksa*) and the *ārdharātrika* systems.
8. Examples.

There are two published commentaries on the *Mahābhāskarīya*: *Bhāṣya*, by Govindasvāmin (fl. ca. 800–850), on which there is a supercommentary (*Siddhāntadīpikā*) by Parameśvara (fl. 1400–1450), and *Karmadīpikā*, by Parameśvara. The anonymous *Prayogaranā* is unpublished, and no manuscripts are known of the *Govindasvāmya* of Sūryadeva and the *Tīkā* of Śrīkantha. The text was published with the *Karmadīpikā* by Balavanta Rāya Āpte, as Ānandāśrama Sanskrit Series, no. 126 (poona, 1945); with Govindasvāmin's *Bhāṣya* and Parameśvara's *Siddhāntadīpikā* by T. S. Kuppanna Sastri, as Madras Government Oriental Series, no. 130 (Madras, 1957); and with an English translation and commentary by Kripa Shankar Shukla (Lucknow, 1960).

The *Laghubhāskarīya* also contains eight chapters:

1. On the mean longitudes of the planets.
2. On the true longitudes of the planets.
3. On the three problems relating to diurnal motion.
4. On lunar eclipses.
5. On solar eclipses.
6. On the visibility of the moon and on its crescent.
7. On the heliacal risings and settings of the planets and on their conjunctions.
8. On the conjunctions of the planets with the stars.

There exist three commentaries on the *Laghubhāskarīya*: Śāṅkaranārāyana's *Vivarana* (869), Udayadivākara's *Sundarī* (1073), and Parameśvara's *pārameśvara*. No manuscripts are known to me of the *Bālaśankara* of Śāṅkara (b. 1494) nor of the *Tīkā* of Śrīkantha. The text was edited with the *pārameśvara* by Balavanta Rāya Āpte, as Ānandāśrama Sanskrit Series, no. 128 (Poona, 1946); with the *Vivarana* of Śāṅkaranārāyana, as Trivandrum Sanskrit series, no; 162 (Trivandrum, 1949); and with an English translation and commentary by Kripa Shankar Shukla (Lucknow, 1963).

BIBLIOGRAPHY

In addition to works listed in the text, readers may consult B. Datta, "The Two Bhāskaras;" in *Indian Historical Quarterly*, 6 (1930). 727–736.

